Currently – 5 August

1. Air India mishap: To avoid turbulence injuries, stay strapped in — The Indian Express, Page 16 — GS-3: Science & Technology (Aviation Safety / Disaster Management).
2. Cut, hike, hold: How RBI decides monetary policy — The Indian Express, Page 16 — GS-3: Economy (Monetary Policy & Inflation).
3. What can be done to curb ‘paper leaks’ and ensure institutional accountability? — The Hindu, Page 9 — GS-2: Polity & Governance (Education, Transparency & Accountability).
4. Jammu and Kashmir — the elusive quest for Statehood — The Hindu (Editorial), Page 6 — GS-2: Polity (Federalism, Centre–State Relations).
5. NATO enters a new strategic era of transformation — The Hindu (Editorial), Page 6 — GS-2: International Relations (NATO & Global Security).
6. Three widely used medicines classified as carcinogenic by WHO research agency — The Hindu, Page 12 — GS-3: Science & Technology (Health / Public Health).

Which of the following statements about insurance in aviation sector is/are correct ?

1. 'Aviation Hull Insurance' covers the physical aircraft, including the body, engine, and on-board equipment.
2. Under the Montreal Convention, adopted in 1999 by over 130 countries, including India, airlines are strictly liable to pay compensation to the family/nominee of every deceased passenger without requiring the family to prove fault.

Select the answer using the code given below :

(a) 1 only

(b) 2 only

(c) Both 1 and 2

(d) Neither 1 nor 2

Which of the following statements with regard to Black Boxes used in modern aircrafts is/are correct ?

1. They carry a beacon emitting red light pulses to facilitate underwater detection.
2. They record both the cockpit voice and flight data.
3. Their memory units are made using either stainless steel or titanium.

Select the answer using the code given below :

(a) 1 only

(b) 2 and 3 only

(c) 1 and 2 only

(d) 1, 2 and 3

• AVIATION

Air India mishap: To avoid turbulence injuries, stay strapped in

Sukalp Sharma
New Delhi, August 4

AN AIR India aircraft encountered severe mid-flight turbulence Tuesday while flying from Thailand's Phuket to New Delhi, experiencing a sudden drop of about 300 feet and resulting in injuries to some of the passengers and cabin crew members.

According to the airline, 17 people – 13 passengers and four crew members – were taken to the hospital for medical evaluation, though the injuries didn't appear to be too serious. The incident is being investigated by India's aviation safety regulator.

A routine occurrence

Turbulence is an irregular motion of the air resulting from circular whirls of air, or eddies, and vertical air currents — updrafts and downdrafts. Its severity can range from a few minor bumps during the flight to the aircraft tossing around with rapid and harsh changes in altitude, which can lead to injuries to those on board and also result in structural damage to the plane in rare cases.

Turbulence is a routine occurrence worldwide with scores of flights encountering it to varying degrees on a daily basis. Some of it may be near the ground, when strong winds around the airport can cause turbulence as aircraft take off or land, or at higher altitudes, where an updraft or downward flow of air in storm clouds can trigger some turbulence as planes fly through or near them. Turbulence also occurs on the edges of jet streams — strong, fast, and narrow air currents that circle the globe.

While turbulence is common, serious injuries caused by it are rare, and fatalities even more so. But there have been exceptions; for instance, one passenger died while several flyers and crew members sustained injuries when a Singapore Airlines jet was hit by sudden and severe turbulence over Myanmar in May 2024.

Altitude and attitude

- Light turbulence could see slight erratic changes in the plane's altitude and attitude — orientation as per the horizon. Moderate turbulence may trigger more notable changes.
- Severe turbulence could see the aircraft momentarily going out of control. In extreme turbulence, the plane is 'practically impossible to control'.

With the explosive growth in air traffic over the past few decades, along with the impact of global warming and climate change, the incidence of severe turbulence — particularly the difficult-to-predict clear air turbulence (CAT) — has grown, studies show. CAT occurs outside of clouds and usually above the altitude of 15,000 feet.

More frequent and severe

The worrying aspect is that climate change could make turbulence more frequent and severe. A 2023 study by researchers from the University of Reading (UK) and the UK Meteorological Office, found large increases in CAT between 1979 and 2020 around mid-altitudes and aircraft cruising altitudes. Over the North Atlantic, severe-or-greater CAT duration rose over 55 per cent in the four-decade period.

Reporting similar increases in turbulence all over the world, the study said the increase is almost certainly the result of climate change. The researchers also estimated that severe turbulence would increase in frequency more than light or moderate levels of turbulence.

Safety protocol

Even when severe turbulence is the primary trigger for an accident, there could be multiple contributory factors, including poor training of crew and inadequate dissemination of weather or wind related information. The US Federal Aviation Administration suggests using operating procedures and training to prevent injuries, promote communication and coordination, and gather data and review the carrier's history of turbulence encounters and injuries.

As a passenger, it is best to keep the seatbelt fastened at all times, unless unavoidable, like when using the lavatory. Most serious injuries are caused when turbulence dislodges the passengers from their seats, and the only way to prevent it is to be strapped in.

Context (GS III – Infrastructure: Civil Aviation)
An Air India flight from Phuket to New Delhi encountered severe turbulence, injuring 17 passengers and crew members, highlighting concerns over aviation safety and passenger protection.

1. Turbulence
I. Turbulence is caused by irregular air movements such as jet streams, thunderstorms, mountain waves and Clear Air Turbulence (CAT).
II. CAT occurs without visible clouds and is difficult to detect using conventional weather radar.
III. Climate change is increasing the frequency and intensity of CAT, especially at cruising altitudes.
IV. Wearing seat belts throughout the flight is the most effective safety measure.

2. Black Box
I. Consists of the Cockpit Voice Recorder (CVR) and Flight Data Recorder (FDR).
II. Protected by titanium or stainless-steel crash-resistant casing.
III. Equipped with an underwater locator beacon (acoustic pinger) for recovery after crashes.
IV. Used by the Aircraft Accident Investigation Bureau (AAIB) to investigate aircraft accidents.

3. Aviation Insurance
I. Aviation Hull Insurance covers damage to the aircraft, including the fuselage, engines and onboard equipment.
II. Passenger liability is governed by the Montreal Convention, 1999, which provides no-fault compensation up to prescribed limits.

4. Relevant Laws
I. Aircraft Act, 1934 – Governs civil aviation in India.
II. Aircraft Rules, 1937 – Regulate aircraft operations and safety standards.
III. Chicago Convention, 1944 – Established International Civil Aviation Organization and global civil aviation standards.
IV. Montreal Convention, 1999 – Governs airline liability for passenger death, injury, baggage and cargo during international carriage.

If the RBI decides to adopt an expansionist monetary policy, which of the following would it ***not*** do ?

1. Cut and optimize the Statutory Liquidity Ratio

2. Increase the Marginal Standing Facility Rate

3. Cut the Bank Rate and Repo Rate

Select the correct answer using the code given below :

(a) 1 and 2 only

(b) 2 only

(c) 1 and 3 only

(d) 1, 2 and 3

Consider the following statements :

Statement–I :

In the post-pandemic recent past, many Central Banks worldwide had carried out interest rate hikes.

Statement–II :

Central Banks generally assume that they have the ability to counteract the rising consumer prices via monetary policy means.

Which one of the following is correct in respect of the above statements?

(a) Both Statement–I and Statement–II are correct and Statement–II is the correct explanation for Statement–I

(b) Both Statement–I and Statement–II are correct and Statement–II is not the correct explanation for Statement–I

(c) Statement–I is correct but Statement–II is incorrect

(d) Statement–I is incorrect but Statement–II is correct

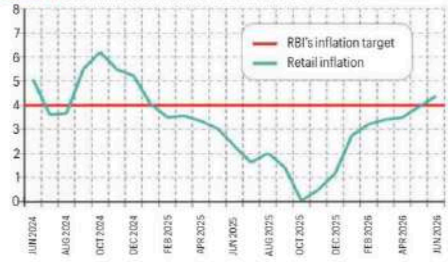
Cut, hike, hold: How RBI decides monetary policy

Most economists expect a 'status quo' on interest rates this time. But even when RBI chooses to hold the course, it does so after weighing several factors

UDIT MISRA

• Retail inflation creeping up

CHART 1: Consumer Price Index, or retail inflation (Y-O-Y % CHANGE)



SOURCE: CENTRE FOR MONITORING INDIAN ECONOMY PVT. LTD.

• Repo rate steadily coming down

CHART 2: RBI's repo rate, or the interest rate at which it lends to banks (IN %)

THE MONETARY policy committee (MPC) of the Reserve Bank of India (RBI) will unveil its next policy statement today.

Once every two months, the RBI's MPC sits down to take stock of India's economy and decide whether it wants to change the interest rates prevailing in the country.

Most economists and observers expect the RBI to "maintain a status quo" on interest rates. The lack of any change in the rates, however, should not detract from the fact that economies around the world are facing a fairly unprecedented level of uncertainty. Even when a central bank decides to do nothing, as it were, it bases its decision after considering several factors.

What's the point of RBI monetary policy reviews?

Like all central banks, the RBI too is charged with the responsibility of maintaining stable prices in the economy. It does this by targeting the retail inflation rate at 4% (with a comfort band of two percentage points on either side).

The RBI's research has shown that this is the ideal rate of inflation that promotes sustained economic growth. If the inflation rate remains persistently higher than 4%, it erodes the purchasing power of consumers. If it stays persistently below 4%, it weakens the profit incentive of producers.

The main tool with which the RBI tries to achieve this 4% inflation target is by tweaking the interest rate it charges when it lends money to India's commercial banks to meet their short-term needs. This interest rate is called the "repo rate".

When the RBI evaluates that economic growth is weak and inflation rate is falling below its target, it reduces the repo rate — making it cheaper for commercial banks to borrow. When the cost of their own borrowing falls, commercial banks cut the rate at which they lend to the rest of the economy — be it a consumer seeking to buy a car or a businesswoman looking to start a firm. This is how the RBI incentivises economic growth while maintaining price stability.

When the RBI sees inflation rate going up too high — either because there is too much demand for goods and services or because there is too little supply — it raises the repo rate to dampen demand. A repo rate increase triggers banks to raise interest rates, thus forcing many to give up their demand for a new car or a new business.

What are the factors it has to consider?

In any meeting, the RBI has three choices: hike interest rates, cut interest rates or maintain status quo.

On the face of it, the RBI targets the retail inflation rate. That, of course, is the main variable on which it bases its decision.

Chart 2 shows retail inflation has risen through 2026 and is now just above the 4% target, even though it is still within the RBI comfort zone of 2% to 6%. *Chart 1* shows the movement of the repo rate over the same period. But looking at just headline inflation is not enough. As things stand, one can argue for a rate cut: after all, inflation is close to the target level and well within the comfort zone even as economic growth is expected to slow down. Or, for a rate hike, since inflation is steadily rising up over the past few months. But since the effect of a repo rate tweak takes time to percolate through the economy (often several months), a central bank has to consider many other factors.

In many ways, the RBI has to continuously assess not just where growth and inflation are at present but where they will be in a few months. Here is a list of some of the other key factors that RBI is likely to take into account in its deliberations.

1. CRUDE OIL PRICES: Higher crude prices don't just raise domestic inflation but also worsen India's trade deficit, hit exchange rate, increase government debt and bring down economic growth. Thanks to the shaky ceasefire between the US and Iran, crude oil prices continue to swing wildly from one week to another. But, crucially, since the middle of June when the peace deal was signed, crude oil prices have gone up by around 11%. If the RBI expects crude oil prices to remain high or possibly even go higher, it may consider raising rates or, at the very least, keep rates higher for longer.

2. US-IRAN HOSTILITIES: The same argument applies here as well. If the war continues, supply of energy will remain constrained and prices will continue to remain elevated. This is more so because apart from the Strait of Hormuz, now even shipping through the Red Sea has come under threat. Such an assessment will likely singe any plans within the RBI to cut interest rates.

3. MONSOON, EL NIÑO, INFLATION: Regardless of what happens to crude oil prices, there is another big threat to domestic inflation in the form of El Niño. El Niño conditions are likely to intensify in the coming months. As of end-July, rainfall is 13% below average and more than 40% of area in the country remains in the deficient category. Water reservoir levels are considerably lower than what they were at the same stage last year. These can affect rabi sowing.

Food inflation was already well above 5% in June and these developments may tilt the RBI towards either raising rates or keeping them at the same level.

4. QUALITY OF GROWTH MOMENTUM: All central banks have to balance between controlling inflation and promoting economic growth. Further, while deciding on its rate policy, the RBI concerns itself not just with the level of growth but also assesses the quality of growth momentum. It is entirely possible that the growth rate in the past year or the last quarter was strong enough but there are emerging signs of weakness.

To assess this, the RBI looks at the picture painted by a whole host of high frequency indicators. For instance, as a recent report from Bank of Baroda notes, "high frequency data for quarter ending June 2026 indicates that airline passenger traffic (including domestic travel), rail freight traffic, diesel consumption, GST e-way bill generation growth, all slowed compared with June 2025". On the other hand, "port cargo traffic, telecom subscribers, vehicle registrations and GST collections have maintained upward momentum" in the same quarter (April, May and June).

Clearly, the high frequency indicators are painting a mixed picture of the economy.

A mixed picture suggests that the underlying growth momentum is uneven — that is, it is not the case that every sector is looking up. This, in turn, has a key policy implication: The RBI will have to be cautious about raising interest rates.

If all sectors were doing well, the RBI could be tempted to raise rates in the hope that the underlying growth momentum is robust enough to take an interest rate hike in its stride. But if growth is not broad-based, a rate hike can also hurt several sectors that were in any case not doing as well.

5. ACTION OF OTHER CENTRAL BANKS: Typically, interest rates in India are higher than the interest rates in the developed countries such as the US and euro area because the inflation rate is also higher. This gap between the two interest rates often plays a big role in attracting global investors to invest in India via the bond market (a market when money is lent and borrowed), thus providing money that is borrowed by Indian companies as well as the government.

As such, if other central banks raise interest rates, there is pressure on the RBI to follow suit and protect India's attractiveness as an investment destination for debt funds.

But there is a flip side too. Higher interest rates also raise the cost of borrowing for everyone in the economy, especially the government. An increase in interest rates can hurt the government's debt calculations.

Rate actions by key central banks

As of July, US Fed, European Central Bank, Bank of Japan, and Bank of England all maintained status quo on the rates in their economies.

•

This brings down the pressure on the RBI to hike rates.

Context (GS III – Economy: Monetary Policy)

The RBI's Monetary Policy Committee (MPC) is reviewing the policy repo rate amid inflationary pressures and global uncertainties to balance price stability with economic growth.

1. Monetary Policy & Monetary Policy Committee (MPC)

I. **Monetary Policy**: RBI's policy to regulate money supply, liquidity and interest rates to maintain price stability and support growth.
II. **MPC**: A 6-member statutory body constituted under the RBI Act, 1934 (2016 Amendment) on the recommendation of the Urjit Patel Committee (2014).
III. **Composition**: RBI Governor (Chairperson), Deputy Governor (Monetary Policy), one RBI nominee and three Central Government nominees.
IV. **Meetings**: Meets at least 4 times a year (generally once every two months).
V. **Decision-making**: Decisions are taken by majority vote; the Governor has a casting vote in case of a tie.
VI. **Inflation Target**: Maintain CPI inflation at 4% (±2%) under the Flexible Inflation Targeting (FIT) framework.
VII. **Policy Tools**: Repo Rate, Standing Deposit Facility (SDF), Marginal Standing Facility (MSF), Cash Reserve Ratio (CRR), Open Market Operations (OMO).

What can be done to curb 'paper leaks' and ensure institutional accountability?

Despite the Public Examinations (Prevention of Unfair Means) Act, 2024, the fundamental need to fix accountability for detecting examination breaches, preventing them and preserving the integrity of public examinations remains

Rajeev Kumar

NEET is one of India's highest-stakes examinations, where intense competition, immense social prestige, and the multi-crore value of a medical seat generate enormous academic, financial, and psychological pressure. Similar pressures surround other national admission, scholarship and recruitment examinations. In such an environment, paper leaks and other irregularities have repeatedly surfaced.

The controversies surrounding NEET-2024, UGC-NET 2024, and NEET-2026 triggered unprecedented national concern. UGC-NET 2024 was canceled and held again, while NEET 2026 was also re-conducted. All three were conducted by the National Testing Agency (NTA), which attributed these decisions to specific external or intelligence inputs.

The CBI investigated the NEET-2024 and UGC-NET 2024 cases. Although the investigations initially led to arrests and extensive nationwide media coverage, the CBI has since submitted closure reports in both cases, reportedly finding no prosecutable evidence of a conventional paper leak under the Bharatiya Nyaya Sanhita (BNS), 2023, or the Public Examinations Act (PEA), 2024. The NEET-2026 investigation remains in progress, with a chargesheet already filed.

These developments raise a more fundamental question: if repeated examination crises ultimately yield no prosecutable evidence of a conventional paper leak, what exactly constitutes a "paper leak"? Where do such compromises originate, and who is responsible for detecting, preventing, and being held accountable for them?

Defining a 'paper leak'

Traditionally, a "paper leak" refers to the unauthorised disclosure of a printed question paper before the examination, typically during printing, packaging, storage, or transportation. Investigation protocols, therefore, focus on tracing printed papers and recovering physical evidence. The recent Maharashtra Teachers Eligibility Test (TET) case is a classic example in which coded printed question papers were allegedly leaked from a compromised printing press.

High-stakes examinations, however, present a far more complex picture. Long before printing, questions pass through question-setting, moderation, translation, digitisation, and final compilation, where a limited number of individuals have privileged access. Compromises at any of these stages may never result in a leaked printed paper. Yet, it can selectively disclose questions or other confidential material, providing an unfair advantage to a few candidates before spreading through organised networks.

The NEET and UGC-NET controversies illustrate this distinction. Although investigations reportedly found no evidence of leaked printed papers in the 2024 cases, the examinations nevertheless led to arrests, cancellations, re-examinations, and a crisis of public confidence. Similarly, the circulation of highly targeted "guided papers" before NEET-2026 raised questions about whether confidential information had flowed through insider or informal networks despite the absence of any recovered printed paper.

Students entering an examination centre in Udupi during the NEET exam on June 21, 2026. FILE PHOTO

Examination compromise may therefore involve far more than a printed paper: selected questions, question banks, recurring themes, high-probability question pools, examiner identities, confidential instructions, digital data, or administrative information may all be unlawfully disclosed through insider access, cyber intrusions, or coaching networks.

Restricting the definition of a "paper leak" to a leaked printed question paper overlooks these significant vulnerabilities. In this context, extraordinary measures such as transporting the re-NEET 2026 question papers by aircraft may secure the final logistical stage but do little to address vulnerabilities at the source. The real issue is whether confidential examination information was disclosed in any form that compromised the fairness, integrity, or credibility of the examination.

Other examination breaches

The integrity of an examination may be undermined equally by failures before, during, or after the examination, even when no printed paper is ever recovered.

NEET-2024 illustrates this broader spectrum. Reported irregularities included the distribution of an incorrect question paper, followed by its replacement; delayed collection or replacement of OMR sheets; exceptional grace marks; tie-breaking disputes; clustering of near-perfect scores; and unusually high scores from certain centres and coaching hubs. Collectively, these exposed weaknesses in examination management and institutional oversight.

Other breaches include cybersecurity failures, manipulation of candidate or examination data, disclosure of confidential information, compromised examination centres, impersonation, organised unfair means, and insider access or coaching-network access to privileged information.

Safeguarding public examinations, therefore, requires securing the entire examination lifecycle – from question development to result processing.

Failures in the transport of printed question papers alone cannot explain many examination breaches. Critical processes–including question selection, paper allocation, examination-centre management, OMR handling, grace marks, result processing, cybersecurity, and access to confidential data–are controlled by the examination authority and its associated agencies. Irregularities at these stages naturally raise questions about institutional controls and insider vulnerabilities.

The NEET-2024 controversy illustrates this broader picture. Distribution of an incorrect question paper, delayed OMR handling, exceptional grace marks, unusually high scores from certain centres, and the circulation of highly targeted "guided papers" all point to vulnerabilities that extend beyond conventional paper leaks. Such patterns warrant scrutiny of repeated expert engagement, conflicts of interest, links to coaching ecosystems, and other insider risks. This does not imply that every irregularity results from insider misconduct. However, securing examinations requires protecting confidential information, institutional processes, and printed question papers alike.

Primary accountability

Preventing examination breaches cannot be left to the CBI, police, or courts, which act only after a crisis. Primary responsibility lies with the examination authority, supported by the Ministry of Education, intelligence, and cybersecurity agencies, and independent oversight.

Accountability should extend across the entire examination lifecycle – from the selection of question setters and translators to examination centres, digital systems, evaluation, and result processing. It requires rigorous antecedent verification, conflict-of-interest scrutiny, periodic rotation of experts, cybersecurity audits, intelligence-based monitoring, and clear audit trails.

Official narrative and unanswered questions

The official response to the NEET-2024, UGC-NET 2024, and NEET-2026 controversies has largely rested on the absence of conclusive evidence of a conventional paper leak. Before the Supreme Court, the NTA attributed the cancellation and re-conduct of NEET-2026 to specific intelligence inputs, while the High-Powered Steering Committee emphasised compliance with its recommendations and SOPs. The CBI's investigations into NEET-2024 and UGC-NET 2024 resulted in closure reports, reportedly finding no prosecutable evidence of a paper leak and no basis to prosecute NTA officials. The NEET-2026 investigation, however, remains ongoing.

These official positions contrast sharply with the ground reality. Cancelled or re-conducted examinations, arrests, allegations of widely circulated "guided papers", cyber-security incidents, operational lapses, and disruptions affecting millions of candidates. In NEET-2026, official action reportedly followed a whistleblower's FIR rather than detection through the examination's own security or intelligence systems.

This raises an obvious question: if no credible abnormality was detected, what justified cancelling NEET-2026? Conversely, if credible intelligence existed, why did institutional safeguards fail to detect or prevent the compromise beforehand?

Until these questions are answered transparently, stronger logistics or harsher penal laws alone are unlikely to restore public confidence. The priority must shift from post-crisis response to institutional prevention.

The way forward

As its first task, the newly constituted committee headed by former UIDAI chairman Nandan Nilekani should prepare a comprehensive White Paper documenting the full spectrum of breaches in NEET-2024, UGC-NET 2024, and NEET-2026–covering leakages, operational failures, cybersecurity incidents, centre-level irregularities, investigations, judicial outcomes, and lessons learned.

The White Paper should underpin a Public Examination Integrity Framework (PEIF) for all major examination bodies. The Framework should prescribe standardised end-to-end SOPs covering the entire examination lifecycle, with an emphasis on conflict-of-interest management, expert selection, cybersecurity, examination administration, audit, and institutional accountability.

Ultimately, public confidence will be restored not by tougher laws or more post-facto investigations, but by an examination system that detects risks early, prevents breaches before they occur, and ensures institutional accountability.

(Rajeev Kumar is a former Computer Science Professor at IIT Kharagpur, IIT Kanpur, BITS Pilani, and JNU, and a former scientist at DRDO and DST.)

CURRENTLY – EDITORIAL TO MAINS ANSWER INITIATIVE

Ensuring Integrity in Public Examinations: Beyond Punishing Paper Leaks

Source: The Hindu (Editorial) | Page: 9 | Date: 5 August 2026

CONTEXT:

Repeated controversies such as NEET-2024, UGC-NET-2024 and NEET-2026 have exposed systemic vulnerabilities in India's public examination system. To restore integrity, the Government has proposed the Public Examinations (Prevention of Unfair Means) Amendment Bill, 2026, introducing stricter penalties, time-bound investigations and specialised institutional mechanisms.

(GS-2: Governance | Education | Transparency & Accountability
GS-4: Integrity, Probity & Accountability)

MAINS QUESTION (15 MARKS) – 250 WORDS

Q. "Paper leaks are symptomatic of deeper institutional failures in India's public examination system." Examine the major challenges affecting examination integrity. Discuss the measures needed to build a transparent, secure and accountable public examination ecosystem. Illustrate your answer with recent legislative reforms.

FLOW OF ANSWER

1. **Introduction** – Paper leaks reflect deeper institutional failures.
   ↓
2. **Challenges** – Root causes and systemic vulnerabilities.
   ↓
3. **Legislative Reforms** – 2026 Amendment Bill as a response.
   ↓
4. **Way Forward** – Measures to build a transparent, secure and accountable system.
5. **Conclusion** – Restoring meritocracy and public trust.

I. CHALLENGES IN THE EXAMINATION ECOSYSTEM

1. Root Causes of Paper Leaks

- **Weak security protocols:** Inadequate safeguards in question setting, printing, storage and transportation create leak risks.
- **Insider collusion:** Officials, printing press staff, logistics personnel or exam authorities leak confidential information for monetary gain.
- **Coaching-centre nexus:** Organised networks exploit leaked papers and insider contacts to secure unfair advantage.
- **Cybersecurity vulnerabilities:** Hacking, phishing and unauthorised access to digital question banks/servers compromise confidentiality.
- **Poor institutional oversight:** Lack of audits, accountability and risk assessment enables malpractice.

2. Paper Leak is Only One Form of Examination Compromise

- **Insider collusion:** Manipulation of question selection, candidate allocation or evaluation.
- **Cybersecurity breaches:** Hacking of servers, theft of encrypted papers or candidate databases.
- **OMR/Result manipulation:** Tampering with answer sheets, digital records or marks.
- **Candidate impersonation:** Use of forged identities or proxy candidates.
- **Organised cheating networks:** Use of devices, leaked information or coordinated malpractice by coaching mafias.

Inference: Securing only question papers is insufficient; the entire examination lifecycle must be protected.

3. Weak Institutional Accountability

- **Fragmented responsibilities** among multiple agencies and functionaries.
- Institutions rarely held accountable; action **limited to individual offenders.**

4. Erosion of Meritocracy and Public Trust

- Honest candidates suffer academic, financial and psychological losses.
- Re-examinations delay admissions and recruitment.
- Public confidence in **merit-based selection declines.**

5. Reactive Rather than Preventive Governance

- Focus on punishment after malpractice rather than **preventive systems.**
- Inadequate emphasis on risk assessment, monitoring and cyber security.

II. LEGISLATIVE REFORMS: PUBLIC EXAMINATIONS (PREVENTION OF UNFAIR MEANS) AMENDMENT BILL, 2026

- **Time-bound Investigation:** Mandatory completion of investigation within 60 days.
- **Special Fast Track Courts:** Dedicated courts; day-to-day trials; disposal within 3 months of filing chargesheet.
- **Special Task Forces (STFs):** Dedicated teams to investigate and dismantle organised cheating syndicates.
- **Special Public Prosecutors:** Appointment of specialised prosecutors for effective prosecution.
- **Time-bound Appeals:** Appeals to be filed within prescribed timelines and decided by designated High Court benches.
- **Enhanced Punishment:** Fine up to ₹10 crore; imprisonment up to 10 years. Higher penalties for organised networks, institutions and service providers.
- **Institutional Accountability:** Liability extends beyond candidates to examination agencies, institutions and service providers facilitating malpractice.
- **Transfer of Pending Cases:** All cases under the 2024 Act to be transferred to Special Fast Track Courts for speedy disposal.

Objective: Speedy investigation, swift justice, stronger deterrence and restoration of transparency, fairness and public confidence.

III. WAY FORWARD

- **Institutional Reforms:** Develop a Public Examination Integrity Framework (PEIF); create an Independent Examination Regulatory Authority; ensure performance-linked accountability.
- **Technology-driven Security:** AI surveillance, end-to-end encryption, blockchain audit trails, regular cybersecurity audits, biometric verification and real-time monitoring.
- **Legal & Enforcement:** Effective implementation of 2026 Amendment Bill; strong witness and whistleblower protection; swift trial and appeals.
- **Administrative Measures:** Rotation of question setters and evaluators; conflict-of-interest disclosures; third-party security audits; Standard Operating Procedures (SOPs) for every stage.
- **Learning from Global Best Practices:** Adopt Ofqual-like independent regulation (UK), military-grade secure logistics (South Korea), AI & biometric surveillance (China) and OECD risk-based auditing standards.

GLOBAL BEST PRACTICES

1. **United Kingdom (Ofqual):** Independent regulator overseeing examination boards through rigorous audits and quality assurance.
2. **South Korea:** Military-grade secrecy in paper preparation, secure printing, sealed logistics and isolation of question setters.
3. **China:** AI-enabled surveillance, biometric verification and signal jammers to prevent electronic cheating.
4. **OECD Practices:** End-to-end digital audit trails; independent third-party audits; conflict-of-interest declarations; robust cybersecurity standards; whistleblower protection.

VALUE ADDITION

- **Second Administrative Reforms Commission (ARC):** Ethics and accountability are central to good governance.
- **National Education Policy (NEP) 2020:** Calls for transparent, technology-enabled assessments and fair evaluation.
- **Digital India Mission:** Secure digital infrastructure for public service delivery.
- **Sustainable Development Goal (SDG-4):** Inclusive and equitable quality education.

IMPORTANT KEYWORDS

- Examination Integrity
- Meritocracy
- Institutional Accountability
- Procedural Fairness
- Rule of Law
- Transparency
- Digital Governance
- Cyber Resilience
- End-to-End Security
- Conflict of Interest
- Whistleblower Protection
- Risk-Based Regulation
- Whole-of-Government Approach
- Public Trust

CONSTITUTIONAL & GOVERNANCE DIMENSIONS

- **Article 14** – Equality before law; ensures fair and non-arbitrary selection.
- **Article 16(1)** – Equality of opportunity in public employment; examination integrity is essential.
- **Article 21** – Fair procedure and protection of dignity; arbitrary cancellations affect rights.
- **Article 21A** – Reinforces the importance of a credible education system.
- **Directive Principles (Article 41)** – Right to education and equal opportunities.
- **Fundamental Duty [Article 51A(j)]** – Strive towards excellence in all spheres.
- **Good Governance Principles** – Transparency, Accountability, Rule of Law, Institutional Integrity and Citizen Trust.

CONCLUSION

A credible public examination system is the cornerstone of constitutional equality, meritocracy and public trust. While the Public Examinations (Prevention of Unfair Means) Amendment Bill, 2026 strengthens deterrence through faster investigations, special courts and enhanced penalties, sustainable reform requires constitutional values of fairness (Article 14), equal opportunity (Article 16), institutional accountability, technological resilience and independent oversight. A robust Public Examination Integrity Framework (PEIF) can transform India's examination ecosystem from reactive enforcement to preventive governance.

Jammu and Kashmir — the elusive quest for Statehood

Radha Kumar

Former Member, Group of Interlocutors for Jammu and Kashmir, and the author of the book, 'The Republic Relearnt: Renewing Indian Democracy, 1947-2024'

Seven years on, J&K still awaits restored Statehood and accountable governance

August 5 marks seven years since Jammu and Kashmir (J&K)'s special status (Article 370) was revoked by the Narendra Modi administration; a few days hence, August 9 will mark seven years of J&K's loss of Statehood. Both actions were accompanied by the most dubious lockdown in India's history. Thousands of troops were flown in, over 5,000 political leaders and cadre were detained, and curfew was imposed together with a communications blockade.

These were emergency measures, yet no emergency was either visible or declared. The Modi administration argued that its measures were temporary and would lead to a violence-free region in which economic growth would be unleashed. Instead, and predictably, violence has continued, as last year's terrorist attacks in Kashmir's Pahalgam (April) and Delhi's Red Fort (November) attest; indeed, it has spread to areas that were relatively dormant, such as Poonch-Rajouri, and from there to adjoining districts of J&K.

Economically, the region continues to suffer. According to the J&K Economic Survey 2025-2026, the ratio of the region's per capita income to the national average is 76.6%, whereas it was 79.9% in 2013-14, a fall of 3.3 percentage points. Unemployment remains close to twice that of the national average; graduate unemployment is as high as 23.9%.

Lockdowns and summons

Kashmiri response to the Pahalgam attack was a wholehearted rejection of violence, expressed in peace marches and candlelit demonstrations. It offered the Modi administration an opportunity for peacebuilding on the ground, beginning with the restoration of Statehood. Instead, the Union Home Ministry chose an even more heavy-handed security response. This year's Amarnath yatra is the most militarised in the history of J&K. Citizens are routinely charged under the draconian Jammu and Kashmir Public Safety Act (PSA) and the Unlawful Activities (Prevention) Act on the flimsiest of grounds; mass summons are common – over 2,000 were called in for questioning after Constable Ashiq Hussain Qureshi was shot on July 22 this year – curfews are more often in place than not; and the Union Territory has had the highest number of Internet and communications shutdowns in the country since 2019.

At the time, few recognised how momentous the Modi administration's actions were, not only in what they did but also in how they did it. Article 370 was hollowed out by executive fiat – a Governor who later said he was 'ordered' to sign by the Union Home Minister. Statehood was removed by legislative fiat, via a Parliament which did not even consider consulting J&K's people or political leaders. No Indian State had been stripped of its Statehood since Delhi lost its Statehood in 1956.

Together, the two actions comprised a breathtaking violation of India's constitutional principles and the basic structure of the Union. They should have been seen as the second major salvo against India's democracy – the first being the re-communalisation of the Indian polity through state-sanctioned attacks on Muslims and Christians – but instead they were hived off as specific to conflict-ridden Jammu and Kashmir.

The belief that draconian measures are justified in a conflict-ridden region is fundamentally flawed both morally and pragmatically, as India knows from its own colonial past. Morally, the argument that subjugation is a means towards a desirable end masks the point that subjugation is a repugnant end *per se*, never a means. Pragmatically, as India knows from its more recent past, subjugation only breeds disaffection which will likely express itself in violence when peaceful means of expression are disallowed.

Yet, the deployment of the argument has allowed the Modi administration to get away with direct rule for seven years. The Supreme Court of India let Solicitor General of India Tushar Mehta parrot the argument for four years before weakly advising that Statehood be restored as soon as possible.

Three more years have passed since then, without the Court hearing petitions seeking a timeline for restoration. At no point did the Court question the Union on the utility of its measures on constitutionally moral, or even merely pragmatic, grounds.

Lieutenant-Governor holds power

The Constitution limited the imposition of emergency conditions to six months. Yet, in J&K, emergency conditions have not been lifted for seven years. Though the J&K High Court has repeatedly and increasingly lamented the misuse of draconian laws by the J&K police, its strictures do not appear to have led to reform. J&K held elections two years ago, but the elected administration has few powers. It is the Lieutenant-Governor who controls the administration, the police and government prosecutors under the 2024 Transaction of Business Rules; he has now been granted emergency powers over telecommunications. As an appointee rather than an elected representative, the Lieutenant-Governor is not accountable to the people.

Accountability through democracy

Thanks to India's young, who so joyfully turned the derogatory 'cockroach' into an assertion of strength, accountability has acquired a salience that it had been stripped of over the past decade. Fortuitously, J&K's ruling National Conference party had already decided to renew a campaign for the restoration of Statehood that the Congress party had launched two years ago but persisted with only fitfully. Now the campaign for Statehood must couch itself in the name of accountability.

As the Constitution clearly recognised, an elected administration is the only way to provide for accountability. Though accountability needs guarantees by an independent legislature, oversight and autonomous institutions and a free media, these too require an elected administration to develop. At base, civil society acquires some space to push for reform under an elected administration, which it lacks under an appointed administration.

Over the past decade, J&K has acquired a number of ugly firsts. It was the first State to undergo wide use of the semi-lethal pellet guns in 2016. (Ironically, pellet guns were developed partly as a less lethal response to the stone-pelting agitation in 2010. Our Interlocutors report had criticised their induction.) It was the first State to lose its special status and its Statehood in 2019. It was the first State to undergo a communal delimitation in which Jammu's demography was altered by the creation of additional Hindu-majority constituencies, some of them with populations below 50,000, in 2022.

Is it not time for J&K to experience some positive firsts instead of suffering only ugly ones? After all, it was the first State to overcome communal gerrymandering when the 2024 elections yielded a majority for the pluralist National Conference-Congress alliance. It is only fitting that it also be the first State to regain the Statehood that has been withheld for so long.

Context (GS-II: Indian Constitution | Federalism | Centre–State Relations | Governance | Democratic Accountability | Internal Security)
Seven years after the abrogation of Article 370 and the reorganisation of Jammu & Kashmir, the debate over the restoration of statehood has resurfaced, highlighting concerns over constitutional federalism, democratic accountability and sustainable peace.

1. Constitutional & Governance Dimensions
► Federalism and Democratic Governance
* Continued Union Territory status raises concerns over the spirit of cooperative federalism and representative democracy.
* The Supreme Court, while upholding the 2019 constitutional changes, observed that statehood should be restored at the earliest.
► Democratic Accountability
* Despite the 2024 Assembly elections, significant executive powers remain with the Lieutenant Governor under the Transaction of Business Rules, 2024.
* Limited powers of the elected government weaken legislative oversight and political accountability.
► Constitutional Perspective
* Article 3 – Parliament's power to reorganise States.
* Article 14 – Equality and non-arbitrary governance.
* Article 21 – Due process and protection of liberty.
* Basic Structure Doctrine (S.R. Bommai v. Union of India) – Federalism, democracy and the rule of law.

2. Key Issues
► Security Challenges
* Major incidents such as the Pahalgam attack (April 2025) and the Red Fort attack (November 2025) indicate that security challenges persist.
* Expansion of militancy into Rajouri and Poonch suggests that security measures alone cannot ensure lasting peace.
► Economic Concerns
* Per capita income: 76.6% of the national average (J&K Economic Survey 2025–26).
* Graduate unemployment: 23.9%.
* Overall unemployment remains nearly twice the national average, reflecting limited economic gains.
► Governance Deficit
* Continued reliance on the Public Safety Act (PSA), preventive detentions and internet restrictions reflects a predominantly security-centric governance model.
* Growing trust deficit between citizens and public institutions.

3. Way Forward

► Restore Statehood

* Restore full statehood to strengthen representative institutions and democratic legitimacy.

► Balance Security with Constitutional Values

* Ensure security measures remain proportionate while protecting civil liberties and the rule of law.

► Strengthen Cooperative Federalism

* Promote regular Centre–State dialogue and empower elected institutions for responsive governance.

► Promote Inclusive Development

* Prioritise employment generation, tourism, infrastructure and private investment to address s

Consider the following countries :

I. Austria

II. Bulgaria

III. Croatia

IV. Serbia

V. Sweden

VI. North Macedonia

How many of the above are members of the North Atlantic Treaty Organization?

(a) Only three

(b) Only four

(c) Only five

(d) All the six

NATO enters a new strategic era of transformation

Advitya Madan

Commanded 15 Punjab in Lebanon under the United Nations Flag, commanded 27 Sector as DIG in Churachandpur, Manipur, and was Brigadier, Operational Logistics, in HQ Western Command. He is currently an analyst on geopolitics, international and defence affairs

For the first time since the creation of the North Atlantic Treaty Organization (NATO) in 1949, Washington is asking Europe not merely to spend more on defence but also to assume primary responsibility for its own security. This marks a fundamental shift in the transatlantic compact and signals the emergence of a new phase in the Alliance's evolution. The question is no longer whether NATO will endure, but how it is adapting to a changing strategic landscape.

America's shift

The National Security Strategy of the United States of America (November 2025) maintained NATO as America's principal transatlantic alliance while signalling a significant shift in Washington's expectations of European allies, particularly regarding burden-sharing and collective defence responsibilities. It argued that the era of the U.S. serving as Europe's primary security guarantor was drawing to a close and that prosperous European allies must shoulder greater responsibility for defending their own continent. While endorsing NATO's commitment to increase defence spending to 5% of GDP as the new benchmark for burden sharing, the strategy envisaged the U.S. remaining the Alliance's strategic enabler, nuclear guarantor and political convener rather than its sole military backbone. The objective is a stronger, more self-reliant Europe that allows Washington to devote greater strategic attention to the Indo-Pacific.

This rebalancing is already evident. Following Russia's invasion of Ukraine in 2022, U.S. troop strength in Europe rose to around 1,00,000 personnel. Since then, Washington has gradually reversed that surge. During 2025-26, it withdrew around 5,000 troops from Germany, cancelled the planned deployment of 4,000 troops to Poland, and reduced Brigade Combat Teams in Europe from four to three, bringing the U.S. military presence in Europe down to approximately 75,000-80,000 troops – close to pre-Ukraine war levels. The 36th NATO Summit in Ankara in July 2026 reinforced this transition. While reaffirming the Alliance's commitment to Article 5, members pledged €70 billion in military assistance for Ukraine in 2026, committed to sustaining comparable support in 2027, endorsed European-led development of long-range precision strike capabilities and accelerated efforts to strengthen NATO's defence industrial base. The underlying message was unmistakable: Europe must assume greater responsibility for its conventional defence as the U.S. increasingly prioritises the Indo-Pacific.

Lord Ismay, NATO's first Secretary General, famously described the Alliance's original purpose as "to keep the Russians out, the Americans in, and the Germans down". While that dictum captured the strategic logic of the Cold War, NATO today has entered a distinctly different phase that may be summed up as keeping Russia deterred, America engaged and Europe prepared.

NATO's European shift offers India new strategic and defence opportunities

NATO's evolution over time

The Alliance's evolution can be viewed in three phases. NATO 1.0 (1949-1991) relied overwhelmingly on American military and nuclear power to deter Soviet aggression and preserve transatlantic unity. NATO 2.0 (1991-2022) followed the collapse of the Soviet Union, expanding eastwards, incorporating former Warsaw Pact members and undertaking operations in the Balkans and Afghanistan. Yet, this period also witnessed declining European defence expenditure and growing dependence on the U.S. for intelligence, logistics, strategic mobility and high-end military capabilities, making burden sharing an increasingly contentious issue.

The Russian invasion of Ukraine has ushered in NATO's third phase, a more balanced transatlantic partnership in which Europe assumes primary responsibility for conventional defence while the U.S. continues to provide strategic enablers such as nuclear deterrence, intelligence, long-range precision strike capabilities and global power projection. This is less a story of American disengagement than one of strategic redistribution.

The scale of Europe's response was evident at the 2025 Hague Summit, where NATO members committed to increasing core defence spending to at least 3.5 % of GDP by 2035, with progress to be reviewed in 2029. Germany has doubled defence expenditure since 2023 and aims to reach the same target by 2029 while rebuilding military capability to deter Russia. Moscow, meanwhile, has reorganised its western military posture with new headquarters, formations and bases facing NATO.

The more difficult challenge, however, is not spending but replacing the American military ecosystem. Even as European armies become stronger, they continue to depend heavily on the U.S. for intelligence, surveillance, satellite support, command and control systems, strategic airlift, missile defence, long-range precision strike capabilities and, above all, the nuclear umbrella. Washington's reduction of rapid reaction assets, including bombers, fighter aircraft, air-refuelling tankers, warships, aircraft carriers and attack submarines, together with the deferred deployment of Tomahawk cruise missiles to Germany, illustrates the extent of that dependence. Europe's central dilemma is therefore not simply building larger armed forces but developing the integrated capabilities that have long underpinned NATO's effectiveness. As Poland's Foreign Minister recently observed, Europe does not need to match American military power; it simply needs to be stronger than Russia.

New Delhi and the rebalance

For India, NATO's transformation is less about Europe than about the redistribution of American strategic attention. A Europe capable of assuming greater responsibility for its own security would enable Washington to devote more diplomatic attention, military resources and strategic investments to the Indo-Pacific, reinforcing the regional balance amid China's growing assertiveness. At the same time, a more capable Europe could emerge as an important partner for India in defence manufacturing, advanced technologies, artificial intelligence, cybersecurity, semiconductors and space.

New Delhi should therefore view these changes through the prism of strategic opportunity rather than alliance politics. Closer cooperation with both the U.S. and Europe can complement, not compromise, India's long-standing commitment to strategic autonomy. If navigated prudently, NATO's new strategic model can expand India's defence industrial partnerships, accelerate technological modernisation and strengthen its position as a leading power in an increasingly multipolar world.

Context (GS II – International Relations: International Organisations & India's Interests)
NATO is redefining its security role amid the Russia–Ukraine war and the U.S.'s strategic shift towards the Indo-Pacific, with implications for Europe and India's strategic interests.

1. Basics of NATO
i. Founded: 1949 (Washington Treaty)
ii. Headquarters: Brussels, Belgium
iii. Members: 32 | Newest Members: Finland (2023) and Sweden (2024)
iv. Core Principle: Article 5 (Attack on one = Attack on all)
v. Objective: Collective defence and security cooperation

2. NATO's Evolution
i. 1949–1991: Counter Soviet Union during the Cold War.
ii. 1991–2022: Eastward expansion; operations in Balkans & Afghanistan.
iii. 2022 onwards: Renewed focus on collective defence after the Russia–Ukraine war.

3. Europe Must Become Stronger
i. Increase defence spending and military preparedness.
ii. Assume greater responsibility for Europe's conventional defence.
iii. U.S. to continue strategic support (nuclear deterrence, intelligence, missile defence) while focusing more on the Indo-Pacific.

4. Implications for India
i. Greater U.S. focus on the Indo-Pacific aligns with India's interests.
ii. Expands cooperation with Europe in defence, AI, cyber, semiconductors and space.

3 widely used medicines classified as carcinogenic by WHO research agency

Bindu Shajan Perappadan
NEW DELHI

Three widely prescribed medicines used to treat high blood pressure, fungal infections, and organ transplant rejection have been classified as "carcinogenic to humans" (Group 1) by the International Agency for Research on Cancer (IARC), the World Health Organization (WHO)'s cancer research agency.

Experts said the classification is a hazard identification and should not prompt patients to discontinue treatment without consulting their doctors.

The three medicines – hydrochlorothiazide (hypertension), voriconazole (fungal infections), and tacrolimus (an immunosuppressant preventing transplant rejection) – are on the WHO Model List of Essential Medicines, prescribed to millions worldwide. The assessment, published as Volume 137 of the IARC Monographs, expands on conclusions first released in *The Lancet Oncology* in November 2024.

There is sufficient evidence that hydrochlorothiazide causes squamous cell skin carcinoma and lip cancer, IARC said.

Voriconazole was similarly linked to squamous cell skin carcinoma in transplant recipients on prolonged therapy, through the same phototoxic mechanism. Tacrolimus was linked to non-Hodgkin lymphoma and post-transplant lymphoproliferative disorder, with limited evidence for leukaemia and skin carcinoma.

Kabir Sardana, Director, Professor and Head of the Department, Department of Dermatology, at Atal Bihari Vajpayee Institute of Medical Sciences and Dr. Ram Manohar Lohia Hospital, said: "Hydrochlorothiazide has long been recognised as carrying a risk, especially in rural areas, the Northeast, hilly and coastal regions, and among outdoor workers.

Voriconazole is another concern, not only because of its known association with skin cancer risk, but also because it is frequently prescribed without labelled indications, including for fungal infections caused by *Trichophyton indotineae*. We cannot ignore these warnings in a country where irrational prescribing, over-the-counter availability, and poor adherence to ethical prescribing and dispensing practices remain significant challenges."

Context (GS II – Health)

The WHO's International Agency for Research on Cancer (IARC) has classified three widely used medicines as Group 1 carcinogens (carcinogenic to humans). The classification identifies a potential cancer hazard and does not mean patients should stop treatment without medical advice.

Medicines Classified as Carcinogenic

i. Hydrochlorothiazide – Used to treat hypertension (high blood pressure).
ii. Voriconazole – Used to treat serious fungal infections.
iii. Tacrolimus – An immunosuppressant used to prevent organ transplant rejection.